



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R03-OAR-2016-0309; FRL-9968-49-Region 3]

**Approval and Promulgation of Air Quality Implementation Plans;
Maryland; Reasonably Available Control Technology for Cement Kilns, Revisions to
Portland Cement Manufacturing Plant and Natural Gas Compression Station Regulations,
and Removal of Nitrogen Oxides Reduction and Trading Program Replaced by Other
Programs and Regulations**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a state implementation plan (SIP) revision submitted by the State of Maryland. This revision pertains to reasonably available control technology (RACT) for cement kilns, revisions to and recodification of certain provisions for Portland cement manufacturing plants (cement plants) and internal combustion (IC) engines at natural gas compression stations, and removal of the obsolete Nitrogen Oxides (NO_x) Reduction and Trading Program that has been replaced by other trading programs or addressed in other regulations. This action is being taken under the Clean Air Act (CAA).

DATES: Written comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R03-OAR-2016-0309 at <http://www.regulations.gov>, or via email to stahl.cynthia@epa.gov. For comments

submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the “For Further Information Contact” section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Marilyn Powers, (215) 814-2308, or by e-mail at powers.marilyn@epa.gov.

SUPPLEMENTARY INFORMATION: On November 24, 2015, the State of Maryland, through the Maryland Department of the Environment (MDE), submitted a SIP revision for approval into the Maryland SIP. The submission is comprised of three State actions pertaining to amendments to COMAR 26.11.01.10, COMAR 26.11.09.08, COMAR 26.11.29, and COMAR 26.11.30. The amendments address the requirement for NO_x RACT for cement kilns for the 2008 ozone national ambient air quality standard (NAAQS), the removal of COMAR provisions

related to the obsolete NO_x Budget Trading Program under the NO_x SIP Call¹ (that has been replaced by other trading programs), the consolidation of all existing and new requirements for cement kilns into one COMAR regulation, the consolidation of all existing and new requirements for IC engines into one COMAR regulation, the addition of new particulate matter (PM) monitoring requirements, and the addition of an alternate monitoring option for visible emissions at cement kilns. On February 17, 2017, MDE provided a letter to EPA clarifying the NO_x RACT limits and withdrawing from EPA's consideration a provision of its regulation for natural gas compression stations.

I. Background

A. NO_x RACT for Cement Kilns

On March 12, 2008, EPA strengthened the NAAQS for ground level ozone, setting both the primary and secondary standards to a level of 0.075 parts per million (ppm), or 75 parts per billion (ppb), averaged over an 8-hour period (hereafter referred to as the 2008 ozone NAAQS).

On May 21, 2012 (77 FR 30088), EPA designated 45 areas as nonattainment under the 2008 ozone NAAQS, including three areas or portions of areas in Maryland. Under section 182 of the CAA, states must review and revise the RACT requirements in their SIP to ensure that these requirements would still be considered RACT under the new, more stringent NAAQS. Major stationary sources of ozone precursor emissions located in ozone nonattainment areas classified as moderate and above (and sources located in the Ozone Transport Region (OTR), of which the entire state of Maryland is a part) are subject to RACT requirements. *See* sections 182(b)(2) and 184(b)(2) of the CAA. Section 182(f) of the CAA specifically requires RACT for major

¹ *See* Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone, 63 FR 57371 (October 27, 1998).

stationary sources of NO_x.² The cement kilns in Maryland are major stationary sources of NO_x and are therefore required to be evaluated for NO_x RACT under the 2008 ozone NAAQS.

B. Repeal of NO_x Budget Trading Program Requirements Under the NO_x SIP Call

In October 1998, EPA finalized the "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone"- commonly called the NO_x SIP Call. The NO_x SIP Call was designed to mitigate significant transport of NO_x, one of the precursors of ozone. The NO_x Budget Trading Program was established under the NO_x SIP Call to allow electric generating units (EGUs) greater than 25 megawatts and industrial non-electric generating units (or non-EGUs) with a rated heat input greater than 250 million British thermal units per hour (MMBtu/hr) (referred to as large non-EGUs) to participate in a regional NO_x cap and trade program.³ The NO_x SIP call also established NO_x reduction requirements for other non-EGUs that were not a part of the NO_x Budget Trading Program, including cement kilns and stationary IC engines.

EPA discontinued administration of the NO_x Budget Trading Program in 2009 upon the start of the Clean Air Interstate Rule (CAIR) trading programs.⁴ The NO_x SIP Call requirements continued to apply, and EGUs that were previously trading under the NO_x Budget Trading Program continued to meet NO_x SIP Call requirements under the more stringent requirements of

² A major stationary source of NO_x in a marginal or moderate ozone nonattainment area, or in an ozone transport region, is a source that emits or has the potential to emit 100 tons of NO_x.

³ In the cap and trade program established under the NO_x SIP Call, a regional ozone season NO_x cap, or budget, was established, which was allocated as NO_x allowances to subject sources in the affected states. Each allowance equaled one ton of NO_x, and allowances could be traded among sources. To comply, sources were required to hold enough allowances to cover their NO_x emissions during the ozone season.

⁴ CAIR was subsequently vacated and remanded. *See North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), modified by 550 F.3d 1176 (remanding CAIR). CAIR was replaced with the Cross-State Air Pollution Rule (CSAPR) (76 FR 48208, August 8, 2011), which, after legal challenges, was implemented starting in January 2015.

the CAIR ozone season trading program. Certain large non-EGUs were not addressed in CAIR. Therefore, states needed to assess their state requirements and take regulatory action as necessary to ensure that all their non-EGU obligations continued to be met.

Maryland regulations, COMAR 26.11.29 – *NO_x Reduction Requirements and Trading Program* and COMAR 26.11.30 - *Policies and Procedures Relating to Maryland’s NO_x Reduction and Trading Program*, were previously approved into the Maryland SIP to implement the NO_x Budget Trading Program and allowed EGUs and large non-EGUs in the state to participate in the regional NO_x cap and trade program established under EPA’s NO_x SIP Call. COMAR 26.11.29 also included NO_x reductions, monitoring, and recordkeeping requirements for cement kilns and IC engines. After EPA discontinued the NO_x Budget Trading Program under the NO_x SIP Call, Maryland’s EGU obligations under the NO_x SIP Call continued to be addressed in Maryland regulation COMAR 26.11.28 – *Clean Air Interstate Rule*. However, in order to fill the gap for large non-EGUs created by the discontinuance of the NO_x Budget Trading Program upon implementation of CAIR and then CSAPR, Maryland needed to take regulatory action to address NO_x reduction requirements for its large non-EGUs. Maryland originally addressed these requirements for large non-EGUs as part of its regulation for kraft pulp mills, and submitted revisions to that regulation as a separate SIP revision, for which EPA took separate rulemaking action.⁵ However, Maryland has identified additional large non-EGUs that are subject to the NO_x SIP Call at two sources, and is now required to take regulatory action to re-allocate the budget to cover both existing and new units. MDE is in the process of developing a new regulation to re-allocate the budget to include all units that are subject to the NO_x SIP Call.

⁵ The NO_x SIP Call requirements applicable to large non-EGUs that were previously in COMAR 26.11.29 are now addressed in Maryland regulation COMAR 26.11.14 – *Control of Emissions from Kraft Pulp Mills*, which MDE submitted to EPA as a separate SIP revision submittal. See rulemaking docket EPA-R03-OAR-2016-0054 for Maryland submittal #14-04 dated October 8, 2014. EPA approved the submittal on July 17, 2017 (82 FR 32641).

The action in this notice pertains only to the cement kiln and IC engine provisions, which were previously approved in COMAR 26.11.29 to address NO_x SIP Call requirements.

II. Summary of SIP Revision and EPA Analysis

Maryland's submittal explained that NO_x RACT for cement kilns, which are major stationary sources of NO_x subject to RACT requirements, was established consistent with the Ozone Transport Commission (OTC) recommended RACT requirements for the 2008 ozone NAAQS. The 2007 *OTC Technical Support Document on Identification and Evaluation of Candidate Control Measures*⁶ (OTC TSD) recommended NO_x emission rates for cement kilns based on applying a 60 percent reduction to uncontrolled emissions.

There are two cement kilns in Maryland -- a long, dry kiln in Washington County (Lehigh Cement Company) and a pre-calciner kiln in Carroll County (Holcim Cement Plant). Revised COMAR 26.11.30 establishes a limit of 3.4 pounds (lbs) of NO_x per ton of clinker (lbs NO_x/ton of clinker) for long, dry kilns, and 2.4 lbs NO_x/ton of clinker for pre-calciner kilns. It defines a pre-calciner kiln as a "cement kiln that contains a pre-calciner at the bottom of the pre-heater tower before the materials enter the kiln," and is commonly referred to as a pre-heater/pre-calciner kiln.

In its November 24, 2015 submittal, MDE stated that the NO_x emission rates for cement kilns are consistent with the OTC recommendations for cement kilns, and on February 17, 2017, MDE provided additional clarification on the justification for the NO_x RACT limits for the cement

⁶ The NO_x limits adopted in Maryland's July 10, 2015 rulemaking were based on the 2007 "Ozone Transport Commission (OTC) Technical Support Document on Identification and Evaluation of Candidate Control Measures," which was included in the State's submission and is available in the docket for this proposed rulemaking action and online at www.regulations.gov.

kilns. As part of its submittal, MDE also provided an estimate of costs to comply with the revised NO_x rates for cement kilns, including the costs to install selective non-catalytic reduction (SNCR) controls to meet the more stringent NO_x rate limits required by its May 21, 2010 regulatory action and the additional costs to increase the amount of reagent used in the SNCR to meet the requirements in its July 10, 2015 action further lowering the NO_x emission rate.

EPA agrees with Maryland's determination of NO_x RACT for cement kilns for the 2008 ozone NAAQS, based on our analysis of the cost effectiveness associated with installation of SNCR, the cost effectiveness for additional operating costs for the increase in ammonia use, as well as the technological considerations involved with further increasing the amount of ammonia used. A more detailed discussion of the NO_x RACT limits for the cement kilns and EPA's analysis is provided in the technical support document (TSD) for this action, available in the docket for this rulemaking at www.regulations.gov.

The November 24, 2015 SIP revision submittal also included several state regulatory actions for inclusion into the Maryland SIP. On May 21, 2010, Maryland repealed COMAR 26.11.29 and COMAR 26.11.30, with a State effective date of May 31, 2010. The requirements for large non-EGUs, cement kilns, and IC engines pursuant to the NO_x SIP Call continue to apply, as noted previously. Therefore, Maryland recodified certain portions of the Portland cement plant and natural gas compression station provisions (formerly found at COMAR 26.11.29.15) into new COMAR 26.11.29 (with a State effective date of July 20, 2015), retitled *NO_x Reduction Requirements for Non-Electric Generating Units*. The cement kiln provisions necessary to address the NO_x SIP Call requirements were revised to add a compliance date of April 1, 2017 for the existing NO_x emission rate limits in the regulation and to remove an alternative control

method.

COMAR 26.11.30 formerly included large non-EGUs as participants in the NO_x Reduction and Trading Program and established an ozone season allocation of 947 tons of NO_x for the large non-EGUs at the only kraft pulp mill located in Maryland.⁷ With repeal of the NO_x Reduction and Trading Program, Maryland modified its kraft pulp mill regulation in COMAR 26.11.14.07 to limit NO_x emissions from fuel burning equipment at kraft pulp mills to 947 tons per year (matching the ozone season allocation formerly in COMAR 26.11.30).⁸ While this addresses the State's current reduction requirements for large non-EGUs, if a new large non-EGU locates in the State at an existing or new kraft pulp mill, Maryland would be required to demonstrate that it is still meeting its federal NO_x SIP Call requirements. If a new large non-EGU locates in the state at a source other than a pulp mill, MDE must take regulatory action to re-allocate the non-EGU budget to cover all large non-EGUs in the State, and require 40 CFR part 75 monitoring for the new non-EGU.

On July 10, 2015, Maryland made some additional regulatory modifications to both COMAR 26.11.29 and 26.11.30. COMAR 26.11.29 was revised to include only the provisions pertaining to IC engines and retitled *Control of NO_x Emissions from Natural Gas Pipeline Compression Stations*. The provisions for Portland cement manufacturing plants were removed from COMAR 26.11.29 and recodified and consolidated with the requirements for cement kilns, which were previously scattered among other COMAR regulations, into new COMAR 26.11.30 – *Control of*

⁷ 40 CFR 97 Appendix C established Maryland's large non-EGU budget as 1013 tons. The kraft pulp mill was allocated 947 tons, with the remainder of the budget reserved in a set-aside account for allocation to new sources.

⁸ The NO_x SIP Call requirements applicable to large non-EGUs that were previously in COMAR 26.11.30 are now addressed in Maryland regulation COMAR 26.11.14 – *Control of Emissions from Kraft Pulp Mills*, which was submitted to EPA as a separate SIP revision submittal, and for which EPA is taking separate action. See rulemaking docket EPA-R03-OAR-2016-0054 for Maryland submittal #14-04 dated October 8, 2014.

Portland Cement Manufacturing Plants (with a State effective date of July 20, 2015). New COMAR 26.11.30 consolidates previous SIP approved requirements for PM, NO_x, sulfur dioxide (SO₂), and visible emissions that apply to Portland cement manufacturing plants.

COMAR 26.11.30 also now contains revised provisions pertaining to PM monitoring requirements. The SIP currently requires compliance with the PM emission limits by stack tests using Method 5 or 5I of 40 CFR part 60. The revision to COMAR 26.11.30 aligned the PM emissions monitoring requirements with the monitoring requirements applicable under the National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry, 40 CFR Part 63, Subpart LLL (Portland cement NESHAP) (78 FR 10006, February 12, 2013). The revision requires performance testing using Method 5 or 5I to establish the parameter to be monitored by the PM continuous parametric monitoring system (CPMS). The PM CPMS will demonstrate continuing compliance with the PM emission limits established in COMAR 26.11.30.04. As explained in more detail in EPA's TSD, the revision strengthens the SIP by the addition of PM CPMS, and is at least as stringent as the monitoring requirements for PM previously approved in the Maryland SIP for cement kilns.

COMAR 26.11.30 also allows cement kilns the option of using PM CPMS for monitoring visible emissions in lieu of a continuous opacity monitor (COM) when a PM CPMS is installed and operated as specified in the rule. In the Portland cement NESHAP, in disagreeing with industry commenters who stated a preference for COMs, EPA explained that "PM CPMS has a clear advantage in low PM concentration measurement over continuous opacity monitoring systems" and that "the CPMS is considerably more sensitive than an opacity monitor or bag leak detector at detecting fluctuations in PM level." The revision in COMAR 26.11.30 allowing the use of

PM CPMS in lieu of COMs is approvable under section 110 of the CAA for the reasons noted above and as discussed in EPA's TSD. EPA does not expect it to interfere with attainment of any of the NAAQS, with reasonable further progress, or with any other CAA requirement.

Finally, the November 24, 2015 submittal proposed to remove from the Maryland SIP former COMAR provisions which implemented EPA's NO_x Budget Trading Program under the NO_x SIP Call as discussed in detail in EPA's TSD for this rulemaking. EPA's NO_x Budget Trading Program under the NO_x SIP Call is obsolete as it was replaced by CAIR, which was subsequently replaced by CSAPR in 2015 and the CSAPR Update in 2017. Therefore, the removal of the NO_x Budget Trading Program requirements from the Maryland SIP that were formerly in COMAR 26.11.29 and .30 does not impact any of the NAAQS, reasonable further progress or any other CAA requirements as those NO_x reductions now are achieved through the CSAPR Update, and the removal is thus approvable under section 110(l) of the CAA.

EPA's TSD prepared for this proposed rulemaking action provides further detail on Maryland's submittal and EPA's analysis of Maryland's SIP revision submittal. EPA's TSD is available in the docket for this rulemaking action and online at www.regulations.gov.

III. Proposed Action

EPA is proposing to approve Maryland's November 24, 2015 SIP revision submittal, as clarified by its February 17, 2017 letter, pursuant to sections 110, 182 and 184 of the CAA. EPA's review of this material indicates that Maryland's November 24, 2015 submittal, as clarified by its February 17, 2017 letter, is approvable as it meets requirements for NO_x RACT for cement kilns for the 2008 ozone NAAQS under sections 110, 182 and 184 of the CAA. EPA is also proposing to approve the Maryland SIP submittal which includes removal of regulations related to the NO_x

Reduction and Trading Program under the NO_x SIP Call as that trading program is no longer operating as it has been replaced by the CSAPR Update as noted previously. Thus, the Maryland regulations in the SIP which addressed the NO_x Reduction and Trading Program no longer provide emission reductions. Additionally, EPA is proposing to approve as part of the SIP Maryland's revised COMAR regulations that recodified certain requirements applicable to Portland cement manufacturing plants and natural gas compression stations and added new requirements for Portland cement plants and natural gas compression stations which are SIP strengthening under section 110 of the CAA. Finally, EPA is proposing to approve a new regulatory provision for inclusion in the Maryland SIP which creates new emission and monitoring requirements for cement kiln emissions as the new provision will strengthen the Maryland SIP and is approvable under section 110 of the CAA. EPA is taking comments on the issues discussed in this document. These comments will be considered before taking final action.

IV. Incorporation by Reference

In this proposed rulemaking action, EPA is proposing to include in a final EPA rule, regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the revisions to COMAR 26.01.10, COMAR 26.11.09.08, COMAR 26.11.29 and COMAR 26.11.30 as described in this proposed rulemaking action. These documents are available electronically through www.regulations.gov and/or may be viewed at the appropriate EPA office (see the ADDRESSES section of this preamble for more information).

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

This rulemaking action proposing to approve NO_x RACT for cement kilns for the 2008 ozone NAAQS; to remove Maryland's NO_x Reduction and Trading Program regulations under the NO_x SIP Call; and to include revised and recodified provisions for natural gas compression stations and Portland cement manufacturing plants in Maryland regulations COMAR 26.11.29 and COMAR 26.11.30 respectively, does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This is due to the fact that this SIP does not apply to Indian country, and therefore will not impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements.

Authority: 42 U.S.C. 7401 et seq.

Dated: October 25, 2017.

Cosmo Servidio,
Regional Administrator,
Region III.

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